

a study on forensic science,” NRC Forensic Science Report, *supra*, at 2 (quoting P.L. No. 109-08, 119 Stat. 2290 (2005)), and the resulting report, published in 2009, heightens these concerns. The committee was charged with, *inter alia*, “disseminat[ing] best practices and guidelines concerning the collection and analysis of forensic evidence to help ensure quality and consistency in the use of forensic technologies and techniques to solve crimes, investigate deaths, and protect the public.” *Id.* (quoting S. Rep. No. 109-88, at 46 (2005)). It specifically addressed firearms examination, toolmarks, and “the use of forensic evidence in criminal . . . litigation,” including “the manner in which forensic practitioners testify in court”; “cases involving the misinterpretation of forensic evidence”; and “judges’ handling of forensic evidence.”¹*Id.* at 3-4.

According to the NRC Forensic Science Report, other than nuclear DNA analysis “no forensic method has been rigorously shown to have the capacity to consistently, and with a high degree of certainty, demonstrate a connection between evidence and a specific individual or source.” *Id.* at 8. The NRC Forensic Science Report pointed out that toolmark identification tests “have never been exposed to stringent scientific scrutiny.” *Id.* at 42. The Report noted that it is “challenging” for an examiner to determine “the extent of agreement in marks made by different tools, and the extent of variation in marks made by the same tool.” *Id.* at 153. Moreover, it said that “these decisions involve subjective qualitative judgments by examiners,” and “the accuracy

¹The Government contends that the NRC Forensic Science Report did not “take into account the holdings of the cases” admitting toolmark identification testimony, and that “the factors to be considered under *Daubert* take much more than precision and repetition into consideration.” Gov.’s Opp’n 6. I disagree. See NRC Forensic Science Report at 107-08 & n.82 (discussing *Glynn*, *Monteiro*, *Green*, and *Diaz*, yet expressing concerns about the reliability of the methodology); NRC Ballistic Imaging Report at 83-84 (discussing *Monteiro*, *Green*, and *Diaz*, yet expressing concerns about the reliability of the methodology).

of examiners' assessments is highly dependent on their skill and training," gained through "past casework" and/or "extensive training programs using known samples." *Id.* It emphasized that "the final determination of a match is always done through direct physical comparison of the evidence by a firearms examiner, not the computer analysis of images," and the examiner makes "a subjective decision based on unarticulated standards and no statistical foundation for estimation of error rates." *Id.* at 153-54.

With regard to toolmark evidence, the NRC Forensic Science Report concluded:

Because not enough is known about the variabilities among individual tools and guns, we are not able to specify how many points of similarity are necessary for a given level of confidence in the result. Sufficient studies have not been done to understand the reliability and repeatability of the methods. The committee agrees that class characteristics are helpful in narrowing the pool of tools that may have left a distinctive mark. Individual patterns from manufacture or from wear might, in some cases, be distinctive enough to suggest one particular source, but additional studies should be performed to make the process of individualization more precise and repeatable.

Id. at 154. Moreover, it characterized the lack of a specific protocol for toolmark analysis as a

"fundamental problem," reasoning that toolmark analysis guidance provided by the AFTE lacks specificity because it allows an examiner to identify a match based on "sufficient agreement,"

which the AFTE defines using the undefined terms "exceeds the best agreement" and "consistent with."²*Id.* at 155.

² Despite this pointed expression of concern by the NRC regarding a fundamental shortcoming in assessing the reliability of toolmark evidence, proponents of the AFTE methodology appear to be at a loss as to how to address it, other than by dismissing it. Indeed, the AFTE's most vocal supporter, Nichols of the ATF Bureau, attempts to address the NRC's concern about the lack of specificity in determining when "sufficient agreement" exists by acknowledging it ("there is no universal agreement as to how much correspondence exceeds the best-known nonmatching situation," Nichols, *supra*, at 589) but then attempting to minimize it ("in practice this limitation

The NRC’s earlier report, the NRC Ballistic Imaging Report, identified similar concerns.

The National Research Council assembled a committee to determine whether a national ballistics database was feasible, and if so, whether it would be accurate and what its technical capabilities would be. NRC Ballistic Imaging Report, *supra*, at 1-2. Characterizing firearm toolmark identification as “part science and part art form,” *id.* at 55, the committee found that “[t]he validity of the fundamental assumptions of uniqueness and reproducibility of firearms-related toolmarks has not yet been fully demonstrated,” *id.* at 3. While explaining that it was “stopping short of commenting on whether firearm toolmark evidence should be admissible,” the committee said: “Conclusions drawn in firearms identification should not be made to imply the presence of a firm statistical basis when none has been demonstrated.” *Id.* at 82. Further, it stated that “additional general research on the uniqueness and reproducibility of firearms-related toolmarks would have to be done if the basic premises of firearms identifications are to be put on a more solid scientific footing.” *Id.* The committee concluded that a national ballistics database “of all new and imported guns is not advisable at this time.” *Id.* at 5.

Thus, the current analytical framework requires consideration of both the broad issue of firearm toolmark identification testimony’s admissibility *vel non* and the narrow issue of admissibility of the evidence in this case. Put another way, the Court must first determine whether expert testimony on toolmark identification is admissible under *Daubert*, *Kumho Tire*, and Rule 702. Then, in the event that this Court finds—as have all others before it that have addressed this issue—that such evidence is admissible in this case, I must determine whether Sergeant Ensor’s testimony is admissible, based on his qualifications and methodology.

is not as significant as critics contend,” *id.*). Nichols argues that adequate training of firearms examiners, coupled with routine proficiency testing, provide an acceptable counterbalance to the lack of standardization of the “sufficient agreement” approach. *Id.* at 589-90.

It would be easier to accept Nichol’s assurances that periodic proficiency testing adequately will ensure against erroneous identifications if there were not so many concerns about the effectiveness of the proficiency test in preventing erroneous determinations of “sufficient agreement.” (The exam is prepared by a private firm, Collaborative Testing Services (“CTS”), and it is the very proficiency test that Sgt. Ensor took and passed annually.) *See Monteiro*, 407 F. Supp. 2d at 367-68 (discussing the proficiency examination given to forensic firearms and toolmark examiners and raising questions of how difficult the test is (“in the 2005 CTS cartridge case examiners *none* of the 255 test takers nationwide answered incorrectly”) and the conditions under which it is given (examiners know when they are being tested)) (emphasis in *Monteiro*). *See also* Schwartz, *supra*, at 24-28 (raising similar concerns).

C. Admissibility of Expert Testimony on Firearms Toolmark Identification

In his famous essay, *Life on the Mississippi*, published in 1883, Mark Twain observed, archly, “There is something fascinating about science. One gets such wholesome returns of conjecture out of such a trifling investment of fact.”³

Both technical publications and court decisions have suggested that the focus in considering the *Daubert* factors should be on whether firearm toolmark identification is a “science,” and if so, whether its methodology will withstand rigorous scientific scrutiny. Although this debate has yet to be resolved (*compare* Schwartz, *supra*, with Nichols, *supra*), the latest scientific consensus is as expressed in the NRC Forensic Science Report. Discussing *Daubert*, 509 U.S. at 579, the NRC stated: “The law’s greatest dilemma in its heavy reliance on forensic evidence, however, concerns the question of whether—and to what extent—there is *science* in any given forensic science discipline.” NRC Forensic Science Report at 9 (emphasis

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Now, if I wanted to be one of those ponderous scientific people, and “let on” to prove what had occurred in the remote past by what had occurred in a given time in the recent past, or what will occur in the far future by what has occurred in late years, what an opportunity is here! Geology never had such a chance, nor such exact data to argue from! Nor “development of species,” either! Glacial epochs are great things, but they are vague—vague. Please observe:

In the space of one hundred and seventy-six years the Lower Mississippi has shortened itself two hundred and forty-two miles. That is an average of a trifle over one mile and a third per year. Therefore, any calm person, who is not blind or idiotic, can see that in the Old Oölitic Silurian Period, just a million years ago next November, the Lower Mississippi River was upward of one million three hundred thousand miles long, and stuck out over the Gulf of Mexico like a fishing-rod. And by the same token any person can see that seven hundred and forty-two years from now the Lower Mississippi will only be a mile and three-quarters long, and Cairo and New Orleans will have joined their streets together, and be plodding comfortably along under a single mayor and a mutual board of aldermen. There is something fascinating about science. One gets such wholesome returns of conjecture out of such a trifling investment of fact.

MARK TWAIN, *LIFE ON THE MISSISSIPPI* 155-56 (Harper & Bros. 1950) (1883).

in original). To be sure, the NRC observed that “*Kumho Tire* importantly held that Rule 702 applies to both scientific and nonscientific expert testimony.” *Id.* at 10 n.15. But, as noted, the NRC focused principally on subjectivity as a pitfall for toolmark identification tests and cautioned that the methods “have never been exposed to stringent scientific scrutiny.” *Id.* at 42.

Professor Schwartz argues that “firearms and toolmark identifications should be inadmissible across-the-board” because “similarities between toolmarks made by different tools and differences between toolmarks made by the same tool imply that a statistical question must be answered to determine whether a particular tool was the source of an evidence toolmark.”

Schwartz, *supra*, at 1; see Adina Schwartz, *Commentary on Ronald G. Nichols, Defending the Scientific Foundations of the Firearms and Tool Mark Identification Discipline: Responding to Recent Challenges*, 52 J. FORENSIC SCI. 586, 586 (2007), 52 J. FORENSIC SCI. 1414 (2007).

Professor Schwartz identifies “three major sources of misidentifications by firearms and toolmark examiners: (1) the individual characteristics of toolmarks are comprised of non-unique marks, (2) subclass characteristics shared by more than one tool may be confused with individual characteristics unique to one and only one tool, and (3) the individual characteristics of the marks made by a particular tool change over time.” Schwartz, *supra*, at 4. She insists that “all firearms and toolmark identifications should be excluded until adequate statistical empirical foundations and proficiency testing are developed for the field.” *Id.* at 1. Professor Schwartz’s Affidavit and her testimony in this case rings of the sentiment that firearm toolmark identification is not a science because toolmark examiners have no reliable methods for determining whether different toolmarks were created by the same weapon. Aff. 9 ¶ 10; Hr’g Tr. 10/26/09. See *Glynn*, 578 F. Supp. 2d at 570 (“ballistics identification analysis . . . could not fairly be called ‘science’”).

While these critics of the science underlying ballistic toolmark analysis raise legitimate concerns about whether the process has been demonstrated to be sufficiently reliable to be called

a “science,” the defenders of the process—and every federal court to have examined the issue in a written opinion (albeit with considerable differences in the amount of detail in the analysis)—have concluded that it is sufficiently plausible, relevant, and helpful to the jury to be admitted in some form. Nichols of the ATF Bureau asserts that “the discipline of firearms and tool mark identification is firmly rooted in the scientific method.” Nichols, *supra*, at 586; *see* Ronald G. Nichols, Author’s Response to Schwartz’s Commentary, *supra*, 52 J. FORENSIC SCI. 1416 (2007); *Diaz*, 2007 WL 485967, at *13 (“There is a method and science behind firearm and toolmark identification.”); *Monteiro*, 407 F. Supp. 2d at 365 (“Firearm identification evidence straddles the line between testimony based on science and experience. . . . Science is in the background, at the core of the theory, but its application is based on experience and training.”). Even in *Glynn*, 578 F. Supp. 2d at 573, after determining that toolmark identification is not a science, the court said that the theory that “unique characteristics of each firearm are to an appreciable degree copied onto some or all bullets and casings fired from that gun . . . is both plausible and sufficiently documented by experience as to provide a good working assumption for most practical purposes.” Accordingly, the *Glynn* court permitted the introduction of firearm toolmark identification, with some limitations. *Id.* at 570.

Professor Schwartz appears to be particularly pointed in her criticisms of courts for allegedly failing to “get it” that firearms toolmark identification is not science. *See* Schwartz, *supra*, at 33 (“Despite *Daubert*, no court has recognized the systemic scientific problems with firearms identification. Instead, courts have tended to wave away challenges to the reliability and admissibility of this type of testimony by pointing to its longstanding admission in court.”). Her testimony at the hearing echoed these concerns. Hr’g Tr. 10/26/09. Professor Schwartz’s criticism perhaps is understandable, given the courts’ nearly uniform failure to share her view

that the methodology underlying the AFTE theory lacks scientific underpinnings. To date, the farthest that courts have been willing to go in excluding firearm toolmark identification evidence is to exclude testimony from individual firearms toolmark examiners who failed to document their conclusions or have them confirmed by another qualified examiner, *see Monteiro*, 407 F. Supp. 2d at 374, or to restrict the degree of certainty to which the examiners could express their identifications, *see Taylor*, 2009 WL 3346485, at *9 (“reasonable degree of certainty in the firearms examination field”); *Glynn*, 578 F. Supp. 2d at 570 (“more likely than not”); *Diaz*, 2007 WL 485967, at *11-12 (“reasonable degree of ballistic certainty”); *see also Monteiro*, 407 F. Supp. 2d at 355 (stating that appropriate standard is “reasonable degree of ballistic certainty”). And, in *United States v. Natson*, 469 F. Supp. 2d 1253, 1261-62 (M.D. Ga. 2007), the court concluded that the firearms and toolmark examiner’s opinions were admissible, thereby implicitly, but not explicitly, condoning “100% degree of certainty.”

However, even were courts widely to accept, as at least one (*Glynn*, 578 F. Supp. 2d at 570) has, that whatever firearms toolmark identification is, it is not “science,” that would not presage the exclusion of all firearms toolmark identification evidence. That is because Rule 702 is not limited to admissibility of scientific evidence alone, but also governs “technical” or “specialized” evidence which, by necessity, does not meet the rigors of scientific analysis. *See Kumho Tire*, 526 U.S. at 141; *Taylor*, 2009 WL 3347485, at *3. Rule 702 permits introduction of technical or specialized evidence if it is given by qualified witnesses, based on sufficient facts, and produced through reliable methods that have been applied reliably to the facts of the case, so long as it is “helpful” to the jury’s understanding of the case or will assist the jurors in making their factual determinations. Indeed, as Justice Scalia noted in his concurring opinion in *Kumho Tire*, the *Daubert* factors of testability, error rate, peer review, general acceptance, and adherence

to standards governing the methodology are relevant to determinations of admissibility under Rule 702, but they are not “holy writ.” *Kumho Tire*, 526 U.S. at 159.

The more accurate characterization of what courts have done with regard to toolmark identification evidence, at least recently, is to recognize as the NRC Forensic Science Report clearly did, that if firearms toolmark evidence is characterized exclusively as “science,” it has a long way to go before it legitimately can claim this status. As the ongoing skirmishes between Professor Schwartz and Nichols demonstrate, it is far from clear which view will prevail. Suffice it to say that the concerns expressed by the NRC ought to be heeded by courts in the future regarding the limits of toolmark identification evidence, and courts should guard against complacency in admitting it just because, to date, no federal court has failed to do so. *But see Monteiro*, 407 F. Supp. 2d at 374 (finding toolmark identification evidence admissible in general, but excluding a particular expert’s testimony based on his failure to adhere to methodology). The more difficult task, but one which *Daubert*, *Kumho Tire*, and Rule 702 demand, is to determine whether, even if not fully grounded in scientific principles, toolmark identification evidence is sufficiently relevant, reliable, and helpful to a jury to be permitted as technical or specialized evidence. *See* Advisory Committee Note to Rule 702 (“The rule is broadly phrased. The fields of knowledge which may be drawn upon are not limited merely to the “scientific” and “technical” but extend to all “specialized” knowledge. Similarly, the expert is viewed, not in a narrow sense, but as a person qualified by “knowledge, skill, experience, training or education.” Thus within the scope of the rule are not only experts in the strictest sense of the word, e.g., physicians, physicists, and architects, but also the large group sometimes called “skilled” witnesses, such as bankers or landowners testifying to land values.”).

And, as the *Taylor*, *Glynn*, *Diaz*, *Monteiro*, and *Green* courts have agreed, even with its increasingly obvious limitations, toolmark identification evidence is relevant, reliable, and helpful if offered (a) by a qualified examiner (b) who followed the AFTE theory (despite its subjectivity) and (c) who documents with notes, photographs, or sketches the conclusions reached in sufficient detail to permit (d) confirmation by a second qualified examiner of how an identification was reached (and, at trial, challenge by a defense expert if one has been engaged for this purpose), so long as (e) the examiner is prevented from making outlandish and unsupported pronouncements about the degree of certainty of his or her identification. To these limitations I would add another. To ensure that defense counsel can make any challenges to the admissibility of toolmark identification evidence and that courts may conduct hearings to resolve these challenges based on sufficient record, the Government should be required to strictly and timely comply with its Fed. R. Crim. P. 16 obligations regarding the opinions to be offered by firearms examiners in sufficient detail and sufficiently far in advance of motions deadlines or trials as to enable defense counsel to evaluate the conclusions and bases, determine whether to engage experts to test them, and if appropriate, challenge them.

While the future may bring greater scientific certainty to toolmark identification evidence (as the proponents of CMS predict) or, alternatively, prove once and for all that it is not scientifically reliable, at present it appears to be, with the foregoing safeguards in place, sufficiently reliable to be helpful to a jury. This is particularly true if defense experts have adequate access to the factual support for the Government toolmark examiner's opinions sufficiently far in advance of trial to be able to rebut or undermine the evidence and to enable a jury to have a balanced assessment of it and to decide what, if any, weight it deserves.

It is to be hoped, particularly if the Government properly lives up to its disclosure obligations under Fed. R. Crim. P. 16, that upon receipt of advance disclosure of toolmark identification evidence, defense counsel will be able to locate toolmark experts of their own. These experts, it is hoped, will be able to review the notes, photographs, and sketches underlying the Government's toolmark identification expert's opinion and, if necessary, perform their own independent study of the toolmark evidence itself. If the evidence is deficient, the defense experts will be able to enable the court to exclude the evidence, or the experts will be able to rebut it at trial. If so, then the adversary system will have lived up to its obligation to frame the factual disputes in a fashion that lay juries are equipped to resolve.

To summarize, several conclusions can be reached. First, as the NRC Ballistic Imaging Report made clear, despite the many studies conducted by toolmark examiners (*see* NRC Ballistic Imaging Report at 64-65, 70-75; Nichols, *supra*, at 588-89), to date, “[t]he validity of the fundamental assumptions of uniqueness and reproducibility of firearms-related toolmarks has not yet been fully demonstrated,” NRC Ballistic Imaging Report at 81, and “[a]dditional general research on the uniqueness and reproducibility of firearms-related toolmarks would have to be done if the basic premises of firearms identification are to be put on a more solid scientific footing,” *id.* at 82.

However, the NRC Ballistic Imaging Report stopped short of concluding that all firearms-related toolmark identification should be excluded as evidence in court, and it acknowledged that the research studies conducted to date have established a “baseline level of credibility” that toolmarks are not “so random and volatile that there is no reason to believe that any similar and matchable marks exist on two exhibits fired from the same gun.” *Id.* at 81. Indeed, the

NRC Ballistic Imaging Report agreed that “[t]he existing research, and the field’s general acceptance in legal proceedings for several decades, is more than adequate testimony to that baseline level.”

Id.

Second, federal courts that have conducted “*Daubert*” analyses on the admissibility of firearms-related toolmark identification evidence have attempted, with varying degrees of success, to apply the non-exclusive evaluative factors of testability, peer review and publication, error rate, general acceptance, and existence and maintenance of standards governing the methodology employed in making these identifications. *E.g., Taylor*, 2009 WL 3347485, at *48; *Glynn*, 578 F. Supp. 2d at 570-74; *Montiero*, 407 F. Supp. at 366-72; *Green*, 405 F. Supp. 2d at 119-24.

While, on the existing record, it may be debatable whether it is “science,” it clearly is technical or specialized, and therefore within the scope of Rule 702. Without repeating what these courts already have said, I find that the theory underlying firearms-related toolmark identification has gone through sufficient testing and publication of studies regarding its reliability and validity to establish a “baseline level of credibility” that sufficiently trained examiners may be able to identify “matchable marks” existing on bullets or cartridges and that these matches are relevant to determining whether the bullets or cartridges were fired from the same firearm. *See* NRC Ballistic Imaging Report at 81.

Much has been said about peer review. The theory behind peer review is that observation leads to commentary, and commentary exposes flawed methodology. Yet, there is a certain reverence that courts give to peer review that perhaps the scientific community does not share. Years before *Daubert*, the New England Journal of Medicine published the following candid assessment

of the peer review process:

[P]eer review is not and cannot be an objective scientific process, nor can it be relied on to guarantee the validity or honesty of scientific research, despite much uninformed opinion to the contrary. Its functions are more modest but nonetheless valuable [G]ood peer reviewed scientific journals should provide their readers with reports of the best available research, free of obvious major flaws. Still, although peer review can screen out work that is clearly invalid and improve the chances that published work is valid, it cannot guarantee scientific validity If peer review cannot guarantee the validity of research, still less can it be relied on to detect fraud.

A. Relman & M. Angell, *How Good Is Peer Review*, NEW ENGLAND J. OF MED., Sept 21, 1989, at 827. Put another way, peer review is important, but it has its own limitations. Nonetheless, the publication of *AFTE Journal* articles on firearm toolmark identification suggests that the theory has been subjected to peer review.

Additionally, I find that, despite its inherent subjectivity, the AFTE theory of firearms related toolmark identification, which has as its primary objective the determination of whether “sufficient agreement” exists between examined bullets or cartridges to enable a toolmark examiner to conclude that there is a “match,” has been generally accepted within the field of toolmark examiners, and that, despite the fact that there is “no universal agreement as to how much correspondence exceeds the best known nonmatching situation,” Nichols, *supra*, at 589, the AFTE training courses and CTS proficiency testing (with all of its limitations) demonstrate the existence of standards governing the methodology of firearms-related toolmark examination to enable a properly trained examiner to provide in-court technical testimony that will be sufficiently reliable and helpful to a lay jury to assist the jurors in determining whether bullets or cartridges have been fired from a particular firearm, with two important qualifications.

First, as already stated, the conclusion expressed by a firearms toolmark examiner that a

match exists is only as good as the underlying photographs, sketches, and notes that support it, and these materials are critical to ensuring that juries are able to learn of any deficiencies that may exist at trial through effective cross-examination of Government toolmark identification witnesses, or testimony by defense rebuttal witnesses. For this reason, where a defendant has made a timely demand pursuant to Fed. R. Crim. P. 16(a)(1)(G) for a written summary of any testimony the Government intends to offer regarding firearms-related toolmark identification, the summary is useless if not accompanied by “bases and reasons” that support it. And, with regard to firearms toolmark identification, that includes the sketches, diagrams, notes, and photographs that the accepted methodology for application of the AFTE theory requires that the firearms examiner make.

Second, and of critical importance, I find that firearms toolmark identification evidence is only relevant, reliable, and helpful to a jury if it is offered with the proper qualifications regarding its accuracy. As the NRC Ballistic Imaging Report helpfully noted, “firearms examiners may often express their findings in bold absolutes—matches made to the same gun, to the exclusion of all other firearms in the world” NRC Ballistic Imaging Report at 67. There is an inherent bias underlying this tendency because “[i]f a firearms examiner is impeached through the *voir dire* process, his or her ability to testify in other cases can be severely affected; being associated with an error or misidentification can tarnish reputations.” *Id.*

From my reading of the many published studies, journal articles, and cases referenced in this Report and Recommendation, it appears that the best that the AFTE theory can offer a jury is the conclusion that the matches between the bullets or cartridges at issue exceed the number of matches between bullets or cartridges known to have been fired from different firearms, and that the matches are “consistent with” (an inherently ambiguous standard for which there is no agreement as to how much correspondence must be shown, Nichols, *supra*, at 589) matches between bullets or cartridges known to have been fired from the same firearm. And, as noted in the NRC Ballistic Imaging Report, respected studies have shown that “the average percent match for bullets from the same gun is low and the percent match for bullets from different guns is

high.” NRC Ballistic Imaging Report at 65 (quoting A.A. Biasotti: 1959, *supra*, at 37-44).

When it is reduced to its essentials, the “sufficient agreement” conclusion can hardly be regarded as an absolute identification, as even its most ardent supporters must concede. *See Nichols, supra*, at 590 (“The AFTE Theory of Identification . . . does not make claims of absolute identification.”). Yet, astonishingly, the AFTE theory purports to demonstrate that once “sufficient agreement” has been found by one examiner, “the likelihood another tool could have made the mark is so remote as to be considered a practical impossibility.” *Id.*

Based on the materials that I have reviewed and the testimony at the hearing, I find that there is no meaningful distinction between a firearms examiner saying that “the likelihood of another firearm having fired these cartridges is so remote as to be considered a practical impossibility” and saying that his identification is “an absolute certainty.” Neither is justified based on the testimony at the hearing or the literature and cases reviewed and discussed in this Report and Recommendation, and neither is warranted by the facts of this case.

Moreover, I agree with the courts in *Taylor*, 2009 WL 3347485, at *9; *Glynn*, 578 F. Supp. 2d at 570; *Monteiro*, 407 F. Supp. 2d at 355; *Diaz*, 2007 WL 485967, at *11-12; and *Green*, 405 F. Supp. 2d at 108-09, that firearms and toolmark examiners must be restricted in the degree of certainty with which they express their identification opinions. Given Sgt. Ensor’s testimony at the hearing, I am reluctant to recommend that he be permitted to testify that he holds his amended identification opinion to “a reasonable degree of ballistic or technical certainty.” *See Monteiro*, 407 F. Supp. 2d at 355; *Diaz*, 2007 WL 485967, at *11-12; *see also Taylor*, 2009 WL 3347485, at *9 (“reasonable degree of certainty in the firearms examination field”).

During cross examination, Sgt. Ensor testified that his own personal examination of various cartridges and bullet fragments, which were confirmed by another qualified examiner in his own lab, led him to look for matches to those bullet components among firearm evidence gathered in connection with other criminal investigations. Hr’g Tr. 10/26/09. He scanned the images of the evidence examined by his lab into the National Integrated Ballistic Identification System (IBIS), which printed out a long list of possible matches with evidence reviewed by other labs in other criminal investigations. *Id.* Among the matches were a series of cartridges examined by firearms toolmark examiners in Baltimore City Case No. 9335, dealing with a homicide. *Id.* He testified that he then undertook to compare some, but not all, of the cartridges in this case, Baltimore County Case No. 1496, with some, but not all, of the cartridges examined by the Baltimore City toolmark examiner.⁴*Id.* Based on this limited physical examination of the Baltimore City evidence, Sgt. Ensor reached one of the conclusions expressed in his September 27, 2007 Amended Report (Report 2), namely:

Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8, Q9, Q10, Q11, Q12 and Q13 (cartridge cases) from Baltimore City Police CC#062K09335 (“Homicide”) were fired in the same unknown firearm as QC-2, QC-3 and QC-4 in this case.

Aff., Ex. B.

Reading Report 2, it is impossible to appreciate that Sgt. Ensor and his colleagues did not personally compare all the cartridges in Case No. 1496 against all of the cartridges in Case No. 9335. Beyond the limited physical examination he did make of the evidence in the City Case, Sgt. Ensor assumes that the cartridges in Case No. 1496 matched the City cartridges he did not examine, because a Baltimore City toolmark examiner—whose qualifications, proficiency, and

⁴ From Sgt. Ensor’s testimony at the October 26, 2009 hearing, it is not entirely clear whether he compared one or more than one of the cartridges in Case No. 1496 with one or more than one of the cartridges in Case No. 9335. In any event, it is clear that he did not examine every cartridge.

adherence to proper methodology is unknown—said they did. Given the importance that the AFTE theory places on the experience and proficiency of the individual examiner, *see Nichols, supra*, at 589, the lack of information about who conducted the individual examinations in the City Case, as well as the lack of information regarding the examiner’s qualifications, training, proficiency, and whether the examiner has been subject to annual proficiency CTS examination, as has Sgt. Ensor, is significant. The jury will be deprived of any information on which to evaluate what weight, if any, to be given to the Baltimore City examiner’s conclusions.

Accordingly, because Sgt. Ensor’s own opinion, for lack of a more elegant expression, piggybacks on those of an unknown Baltimore City examiner, I recommend that Sgt. Ensor not be able to express his opinions to the same degree of certainty as other courts have permitted in *Taylor, Glynn, Diaz, or Monteiro*. As noted, *infra*, I am recommending that Sgt. Ensor: (1) be permitted only to state his opinions and bases without any characterization as to degree of certainty (whether “more likely than not” or “to a reasonable degree of ballistic certainty”) and that if Judge Quarles does not agree with its limitations, that, at a minimum, Sgt. Ensor not be allowed to opine that it is a “practical impossibility” for any other firearm to have fired the cartridges other than the common “unknown firearm” to which Sgt. Ensor attributes the cartridges (which the Government concedes it will not seek to have him do, Hr’g Tr. 10/26/09); (2) if Judge Quarles does not determine to impose this much of a restriction, then, alternatively, I recommend that Sgt. Ensor only be allowed to express his opinions “more likely than not,” as in *Glynn*; or (3) at most, “to a reasonable degree of ballistic certainty,” as in *Monteiro* and *Diaz*.

I note in making this recommendation that there is nothing in Rule 702, *Daubert*, *Kumho Tire*, or the other cases analyzing this type of evidence, that an expert is required to express any particular level of confidence in the degree of accuracy in his opinions. *See Samuel v. Ford Motor Co.*, 112 F. Supp. 2d 460, 470 (D. Md. 2000) (stating that an expert need not “testify with absolute certainty, or without any doubt whatsoever,” provided that “the opinion has a tendency to prove a consequential fact by probability”), *aff’d*, 95 Fed. App’x 520 (4th Cir. 2004); *see also*

Glynn, 578 F. Supp. 2d at 574 (an “exalted level of certainty” is not required for evidence to be admissible). Such an estimate, even if supported by the facts, goes to the weight of the evidence, not its admissibility. And, without a proper basis for supporting the confidence level testified to, there is a real danger of misleading the jury.

D. Qualifications of Sergeant Ensor to Testify

Having determined that, as qualified above, the Government should be permitted to introduce opinion testimony regarding firearms toolmark identification because such evidence is admissible under *Daubert*, *Kumho Tire*, and Rule 702, it remains to be determined whether Sgt. Ensor, the Government’s witness, is qualified pursuant to Fed. R. Evid. 702—that is, whether he possesses sufficient “knowledge, skill, experience, training, or education” to offer helpful opinion testimony (qualified as mentioned, *supra*) on the subject of firearm toolmark identification. For the following reasons, I conclude that he does, with the restrictions already noted.

Sgt. Ensor has been with the Baltimore County Police Department (“BCPD”) since 1983, and he has worked in the Forensic Services Section for more than twenty years. Docs. 223. In 1995, he completed a three-year training program in firearm and toolmark identification, based on the AFTE Manual, at the Maryland State Police Crime Laboratory. Docs. 225. He attended the week-long AFTE National Training Seminar annually from 1995 through 2002, and also in 2004, 2006, 2008, and 2009. Docs. 228. In addition, he attended the two-day Eastern Regional Firearms and Tool Mark Training Seminar five times. Docs. 225-27. He also has attended weeklong programs, such as the FBI “Specialized Techniques in Firearms Identification School” and Forensic Technologies Integrated Ballistics Identification System training, and a two-day workshop on source

tool recognition. Docs. 226-27. Further, he “[p]articipated in developing and administering the procedures and standards affecting the Firearms Identification Unit for the Baltimore County Police Forensic Services Section, subsequently meeting the prescribed requirements of the American Society of Crime Laboratory Directors Laboratory Accreditation Board and achieving accreditation for the unit.” Docs. 226. Sgt. Ensor is AFTE-certified in firearm and toolmark evidence examination and identification; he is a member of the AFTE; and he has passed the CTS firearms proficiency test annually since 1998. Docs. 229-41.

E. Documentation and Peer Review

With regard to documentation, the Government initially, on August 7, 2009, produced three reports that Sgt. Ensor prepared, dated August 10, 2007 (“Report 1”), September 27, 2007 (“Report 2”), and July 23, 2008 (“Report 3”). On or about October 16, 2009, the Government reproduced Reports 1 and 2, along with 239 pages that contain the documentation underlying Sgt. Ensor’s identifications and the review done by other examiners to confirm it.⁵ At the hearing, twenty-six additional documents of the same nature were produced. Hr’g Tr. 10/26/09. While this supplementation was appropriate, it came one week before trial, and such a belated disclosure is far from timely.

The supplemental documents produced on or about October 16, 2009, included another report from July 23, 2008 (“Report 4”), as well as sixty-three pages of documentation and

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On October 21, 2009, the Government provided the Court with a binder of these same documents (“Docs.”).

photographs;⁶ BCPD Standard Operating Procedures for Firearms and Toolmark Identification (“SOPs”); Sgt. Ensor’s curriculum vitae; and the Certificate of Accreditation for the BCPD Forensic Services Division. Docs. 72-246. The documents produced at the hearing on October 26, 2009, included a report that Michael J. Thomas conducted on April 28, 2006 (“Report 5”); a report that Thomas conducted on August 27, 2007 (“Report 6”); a Comparison Verification sheet for Report 4, filled out on May 1, 2006; and supporting documents. Hr’g Tr. 10/26/09.

The documentation produced on or about October 16, 2009, includes Bullet and Cartridge Case Examination Worksheets, with photographs, that Sgt. Ensor prepared in February and July, 2007, Docs. 38, 39, 47, 51. Sgt. Ensor also prepared thirteen pages of additional notes with various comparison images and photographs, in January, February, and July 2007. Docs. 11, 18, 19, 20, 37, 42-46, 48-50, 52, 69. A number of the documents were completed by Officer Jeff Schaub, a firearms examiner trainee in the Firearms Identification Unit of the Forensic Services Section of the BCPD, under Sgt. Ensor’s supervision: Bullet and Cartridge Case Examination Worksheets from January, July, and August, 2007, Docs. 16, 21, 23, 28, 29, 33; notes from January, February, June, and July, 2007, Docs. 10, 22, 34, 36, 35; IBIS Correlation Results and database search results from December, 2006, and February, 2007, Docs. 17, 24-27, 31-32, 4041; and two comparison images, Docs. 30. The documents also included three Image Comparison pages printed in June 2007, and initialed by Ofc. Schaub in July 2007, Docs. 12-14; notes and photographs in other cases, Docs. 9, 15; and twelve inventory pages, Docs. 54-65.

Summarizing, on August 7, 2009, one week before the deadline for filing defense

⁶ Reports 3 and 4 appear to be based on the same examination and contain the same results. Report 4 was prepared for this case, while Report 3 was prepared for a separate case.

motions, the Government produced Sgt. Ensor's first three reports, absent any supporting documents. After the motions were filed, and following the October 15, 2009 hearing, 239 pages of documents constituting the bases for Sgt. Ensor's reports were produced, and finally, at the October 26, 2009 hearing, an additional series of twenty-six documents were produced. While arguably produced in sufficient time to allow Defense Counsel to make eleventh hour preparations to use it at trial, the disclosure of the documents constituting the support and bases for Sgt. Ensor's opinions was requested as early as May 2009, and should have been produced under Fed. R. Crim. P. 16 far earlier than it was. Its belated production affected not only Defense Counsel, but also the undersigned's ability to conduct an effective hearing and complete a helpful report and recommendation.

What the late-produced reports do demonstrate is the documentation underlying Sgt. Ensor's opinions, and that his opinions were "peer reviewed" by other examiners, the two procedural conditions precedent to admissibility required by the *Monteiro* court. Also Sgt. Ensor's late-produced curriculum vitae shows his qualifications, discussed *supra*. Thus, with the restrictions stated in this Report and Recommendation, I find that Sgt. Ensor is qualified to provide opinion testimony in this case.

II. Defendant Mouzone's Rule 16 Motion

Defendant Mouzone claims that, as of the hearing on October 15, 2009, despite his repeated requests by mail, phone, and e-mail for "written reports, bench notes, photographs, manuals, and laboratory standards relevant to the testing and for curriculum vitae of all examiners," the Government "has provided only the barest summary of the examiner's conclusions but nothing at all as to the bases of fact on which this opinion is based, nor the

examiner's qualifications," nor "any other documents to support this intended conclusion."

Def.'s R. 16 Mot. ¶¶ 3-5. Defendant Mouzone asserts that he first requested these documents from the Government on May 15, 2009, but the Government did not produce any documents until August 7, 2009, at which time it produced only Sgt. Ensor's conclusions. *Id.* ¶¶ 6-7. He points out that the Court-imposed pretrial motion deadline was August 14, 2009, and trial is set for November 2, 2009. *Id.* ¶¶ 7, 14. He insists that his resulting inability "to consult with an appropriate expert" prejudiced his defense and therefore "the appropriate sanction is to prohibit the government from introducing this evidence" at trial.⁷ *Id.* ¶¶ 7, 11.

⁷ It cannot seriously be denied that production of such important evidence, long in the possession of the Government, one week before the deadline for filing motions *in limine* raises the suspicion that the timing of the disclosure was calculated to place Defendant Mouzone at a tactical disadvantage in challenging the evidence.

At the hearing held on October 15, 2009, the Assistant United States Attorney who is prosecuting this case acknowledged that he had been in possession of the documents that memorialized the firearms toolmark identification evidence (but not the underlying photographs and notes) for two years, yet the press of other cases and the fact that this case was indicted as a multi-defendant case, prevented him from realizing earlier just how much information there was. He advised the Court that there had been no intent to hamper Defendant Mouzone's trial preparation.

I have no reason to question the sincerity or credibility of this explanation. However, to accept it is not to condone it. If Defense Counsel had not so vigorously pursued the matter and the Court had not been able to address it when it did, the delay in production might very well have warranted a harsher sanction against the Government than recommended by this Report and Recommendation. As it stands, while Defense Counsel and the Court have now been provided with all the materials that should have been produced, they were received less than two weeks—some only one week—before the trial starts. This is far too little time to enable either effective analysis and preparation of a rebuttal by the Defendant or deliberate consideration by the Court of any challenge to the admissibility of the toolmark identification evidence. This belated disclosure led to Judge Quarles having to refer this hearing to the undersigned to conduct an

expedited hearing and prepare a Report and Recommendation, which itself will of necessity be issued within a week of trial. Thus, the Government's failure to live up to its Rule 16 obligations not only had serious adverse impact on the Defendant, but also on the Court.

Alternatively, Defendant Mouzone asked that the Court “order the government to immediately produce” the relevant documents. *Id.* ¶ 14. On October 16, 2009, after Defendant Mouzone filed his Rule 16 motion but without a Court order, the Government produced Sgt. Ensor’s curriculum vitae and proficiency test results; bench notes from Sgt. Ensor and his colleagues; comparison images and other photographs; Comparison Verification sheets; BCPD’s Firearms and Toolmark Identification SOPs; and the Certificate of Accreditation for the BCPD Forensic Services Division. Docs. 1-246. Further, on October 26, 2009, the Government produced additional reports and supporting documentation. Docs. 247-72.

Rule 16(a)(1)(F)-(G) provides:

(F) Reports of Examinations and Tests. Upon a defendant's request, the government must permit a defendant to inspect and to copy or photograph the results or reports of any physical or mental examination and of any scientific test or experiment if:

- (i) the item is within the government's possession, custody, or control;
- (ii) the attorney for the government knows—or through due diligence could know—that the item exists; and
- (iii) the item is material to preparing the defense or the government intends to use the item in its case-in-chief at trial.

(G) Expert witnesses.—At the defendant's request, the government must give to the defendant a written summary of any testimony that the government intends to use under Rules 702, 703, or 705 of the Federal Rules of Evidence during its case-in-chief at trial. . . . The summary provided under this subparagraph must describe the witness's opinions, *the bases and reasons for those opinions, and the witness's qualifications.*

Fed. R. Crim. P. 16(a)(1)(F)-(G) (*emphasis added*). It is undisputed that the Government did not provide Sgt. Ensor’s qualifications or “the bases and reasons” for Sgt. Ensor’s opinions until October 16, 2009, five months after Defendant Mouzone’s request and seventeen days before trial. Moreover, the Government did not complete its disclosure of Sgt. Ensor’s reports and bench notes until October 26, 2009, one week before trial.

Rule 16 does not impose a deadline for the defendant’s request or the Government’s

production, but “it is expected that the parties will make their requests in a timely fashion.”

Amendments to Fed. R. Crim. P., 147 F.R.D. 387, 473 (1993). In *United States v. Richmond*, 153 F.R.D. 7, 8 (D. Mass. 1994), the court addressed “the time within which the government must make the disclosure mandated by Rule 16(a)(1)(E)” (later relettered as Rule 16(a)(1)(G)). Reasoning that the Rule ““is intended to minimize surprise that often results from unexpected expert testimony, reduce the need for continuances, and to provide the opponent with a fair opportunity to test the merit of the expert's testimony through focused cross-examination,”” the court concluded that, to the extent possible, the Government should produce the requested summary “forthwith upon the defendant’s request.” *Id.* (quoting Amendments to Fed. R. Crim. P., 147 F.R.D. at 473). The court said that if “the government's trial preparation has not proceeded to the point where an expert's written summary has been prepared or can be prepared” when the defendant makes a Rule 16 request, then the Government must provide the summary “not less than forty-five calendar days before trial.” *Id. Accord United States v. Palmero*, No. 99 CR. 1199, 2001 WL 185132 (S.D.N.Y. Feb. 26, 2001) (unpublished) (“Forty-five days prior to trial is not at all out of line with the purpose of the Rule.”) (citing *Richmond*, 153 F.R.D. at 8-9).

Here, the Government’s full disclosure was a far cry from “forthwith upon the defendant’s request,” *Richmond*, 153 F.R.D. at 8, trailing Defendant Mouzone’s May 15, 2009, request by more than five months, and following Defendant Mouzone’s Rule 16 motion and a hearing on the motion on October 15, 2009, Paper No. 669. Moreover, the Government’s earlier disclosure on August 7, 2009, was neither prompt nor complete. And, the Government conceded that it had the reports in its possession for two years prior to the request, attributing its tardy production to a miscalculation of the time needed to locate and produce the documents. Hr’g Tr. 10/15/09. Full disclosure came only week before trial.

The failure to produce the documents constituting the bases and reasons for Sgt. Ensor's firearms toolmark identifications was particularly troublesome in this case because, as the preceding pages of this Report and Recommendation attest, there is a substantial debate within the scientific community, as well as the Courts, regarding the degree to which firearms toolmark identification evidence passes muster under Fed. R. Evid. 702 and *Daubert*. As the literature, publications, and cases discussed earlier reveal, the subjectivity of firearms toolmark identification methodology places a great degree of emphasis on the individual's training and proficiency, and the AFTE methodology requires proper documentation by notes, sketches, and photographs that illustrate how the examiner reached his or her conclusions, so that other examiners may confirm the conclusions by reference to the supporting materials. The Courts that, in increasing number, have expressed concerns regarding the reliability of firearms toolmark identification evidence, have permitted its introduction in spite of their concerns, in substantial reliance on the ability of defense counsel to be able to challenge the identification at trial through effective cross-examination, or by offering defense experts to challenge it. In addition to the importance of effective cross-examination or rebuttal to the Court and the Defendant, it is even more important to the jury, which is charged with deciding how much, if any, of it to accept. In this context, the production seventeen days before trial of 239 pages of additional documents relevant to Sgt. Ensor's expert testimony (and that only after a motion had been filed and a hearing held), and the production one week before trial of twenty-six additional pages is disdainful of the Defendant's due process rights to a fair trial, the Court's obligation to ensure one, and the jury's obligation to make sense out of a highly technical subject matter that has generated intense disagreement within the scientific, technical, and judicial communities.

"Rule 16 grants the district court substantial discretion in dealing with a violation of a

discovery order.” *United States v. Hammoud*, 381 F.3d 316, 336 (4th Cir. 2004), *vacated on other grounds*, 543 U.S. 1097 (2005). Indeed, a court may order discovery; “grant a continuance”; “prohibit that party from introducing the undisclosed evidence”; or “enter any other order that is just under the circumstances.” Fed. R. Crim. P. 16(d)(2). The Fourth Circuit outlined the factors a district court should consider in applying appropriate sanctions for a discovery violation under Fed. R. Crim. P. 16(d)(2). It stated that the court:

“must weigh the reasons for the government's delay and whether it acted intentionally or in bad faith; the degree of prejudice, if any, suffered by the defendant; and whether any less severe sanction will remedy the prejudice and the wrongdoing of the government.”

Id. (quoting *United States v. Hastings*, 126 F.3d 310, 317 (4th Cir. 1997), *cert. denied*, 523 U.S. 1060 (1998) (identifying the factors with regard to imposing sanctions for the Government’s refusal to comply with court-ordered discovery)). In *Hastings*, the Fourth Circuit held that “dismissal of the indictment against Hastings was an extreme and inappropriate sanction” because “[w]hen a court sanctions the government in a criminal case for its failure to obey court orders, it must use the least severe sanction which will adequately punish the government and secure future compliance.” 126 F.3d at 317.

As noted, the Government’s delay in producing the scant summary was occasioned by poor time management, which, however understandable, may not be condoned. The Government attributed its delay in producing the supporting documents to difficulty obtaining the documents from the witness and his laboratory. Hr’g Tr. 10/15/09. Although these reasons do little to justify the delay, they do not suggest any intentional or bad faith conduct on the part of the Government.

As for prejudice, I find that the prejudice that resulted from the Government’s initial

incomplete disclosure was great. Firearms toolmark identification is “admittedly ‘subjective’ and based on experience and training of the individual examiner.” *Monteiro*, 407 F. Supp. 2d at 366. Therefore, peer review and documentation are prerequisites to admissibility, and the examiner’s qualifications are of utmost importance. *Id.* at 355. With regard to firearms identification testimony, documentation and verification of the basis for any identification are critical. *See id.* Without this information, and without any description of Sgt. Ensor’s qualifications, the Government’s August 7, 2009 summary did not provide sufficient information to be admissible at trial. *See id.* As a result, Defendant Mouzone could not determine the reliability of Sgt. Ensor’s work, whether he had to defend against Sgt. Ensor’s conclusions, or if so, how to build that defense. *See United States v. De La Rosa*, 196 F.3d 712, 716 (7th Cir. 1999) (“‘A defendant is prejudiced under Rule 16 only when he is unduly surprised and lacks an adequate opportunity to prepare a defense, or when the violation substantially influences the jury.’”) (citation omitted). *Cf. United States v. Taylor*, 857 F.2d 210, 215 (4th Cir. 1998) (concluding that there was no prejudice caused by the Government’s delay in producing an FBI surveillance report because it “was largely duplicative of grand jury testimony” that the defendant already had received).

But, the prejudice caused by this incomplete disclosure has been tempered by the delivery of the requested documents in time for Defense Counsel to review the documents and consult an expert and for this Court to hold a hearing and proceed to trial. In this regard, *United States v. Stevens*, 380 F.3d 1021 (7th Cir. 2004), is informative. There, the Government produced its fingerprint expert’s report only one week before trial, but on the same day that the evidence came into the Government’s possession. *Id.* at 1024-26. Reasoning that the defendant had the

opportunity to cross-examine the Government's fingerprint witness, and could have requested a continuance to secure his own fingerprint expert, but failed to do so, the Seventh Circuit concluded that the defendant was not prejudiced by the Government's tardy disclosure under Rule 16. *Id.* at 1025-26. *See also United States v. Douglas*, 862 F. Supp. 521, 526 (D.D.C. 1994) (concluding that Government's failure to produce evidence in discovery did not prejudice defendant because defense counsel could have (but did not) request a continuance, which would have "alleviate[d] the prejudice"; noting that "[s]everal courts have held that when defense counsel fails to request a continuance after a discovery delay, such failure erases any potential prejudice created by the delay"), *aff'd without op.*, 70 F.3d 638 (D.C. Cir. 1995).

With regard to an appropriate sanction in this case, the merit of ordering production at this late juncture is moot, as the Government now has satisfied the request. *See United States v. Bates*, No. 02-80948, 2005 WL 2218902, at *5 (E.D. Mich. Sept. 13, 2005) (unpublished) ("The conventional remedies proposed by Rule 16(d)(2), such as permitting discovery of the undiscovered materials, are moot, given the ultimate disclosure of the reports."). Further, because the Government has satisfied the request, it would be too severe a sanction to dismiss the indictment or to bar the Government from introducing the evidence. *See Hastings*, 126 F.3d at 317.

While the late production by the Government has clearly imposed a burden on Defendant Mouzone's counsel in having to do last minute preparation for trial, there also is a monetary consequence, involving the expense of additional work by the court-appointed attorney to obtain the documents at issue, and additional work by Defendant Mouzone's expert witness to challenge the admissibility of seemingly inadmissible skeletal reports that have since been substantiated. Recently, in *United States v. Jones*, 620 F. Supp. 2d 163 (D. Mass. 2009), after the prosecutor failed to

disclose material exculpatory information from her notes after the defendant requested such information, the court found that the prosecutor exhibited “inexcusable ignorance, or a reckless disregard, of a constitutional duty,” *id.* at 179, and concluded that the court could impose a monetary sanction on her and the United States Attorney’s Office, *id.* at 178.⁸ As authority, the court quoted Rule 16’s provision for sanctions including “any [] order that is just under the circumstances.” *Id.* at 179 (quoting Fed. R. Crim. P. 16(d)(2)(D)). Alternatively, the court said that it had “the authority to impose monetary sanctions on [the prosecutor] as an exercise of its inherent supervisory powers.” *Id.* (citing *Chambers v. NASCO*, 501 U.S. 32, 45-46 (1991)). It noted that “‘a court’s array of supervisory powers includes the power to assess attorneys’ fees against other parties or their attorneys in befitting situations.’” *Id.* (quoting *United States v. Horn*, 29 F.3d 754, 760 (1st Cir. 1994)). However, in *Horn*, the First Circuit cautioned that although it would “consider unleashing the supervisory power in criminal cases ‘[w]hen confronted with extreme misconduct and prejudice,’ in order ‘to secure enforcement of ‘better prosecutorial practice and reprimand of those who fail to observe it,’” the doctrine “applies only when there is no effective alternative provided by rule, statute, or constitutional clause.” 29 F.3d at 760 (citations omitted).

My research has not uncovered any other case suggesting that monetary sanctions could be imposed for failure to comply with Rule 16. To the contrary, the Ninth Circuit held that monetary sanctions were not appropriate under Rule 16 because the Rule does not provide an express waiver of sovereign immunity and, unlike Fed. R. Civ. P. 11 and 37(b), Fed. R. Crim. P. 16 “provides no independent authority for a monetary sanction.” *United States v. Woodley*, 9 F.3d 774, 781 (9th Cir. 1993). Similarly, in *Bates*, 2005 WL 2218902, at *5, the court concluded that “principles of sovereign immunity preclude ordering the government to reimburse” the defense for its expenditure of “additional time and limited monetary resources as a result of the

⁸ Ultimately, the court did not impose monetary sanctions, requiring instead attendance at “an educational program concerning discovery in criminal cases” and a later showing of progress by the United States Attorney and the prosecutor, and a statement as to “why sanctions should not be imposed in this matter.” *Id.* at 185.

government's Rule 16 violations." But, the court stated that its "Opinion and Order may appropriately be factored into any request for additional funds under the Criminal Justice Act." *Id.*

Of the possible sanctions, a continuance is most appropriate, if Defendant Mouzone requires more time for a defense expert to prepare for trial and if Defendant Mouzone is amenable to the postponement. To be sure, Defendant Mouzone did not expressly request a continuance. Nonetheless, a continuance is "just under the circumstances." Fed. R. Crim. P. 16(d)(2)(D). Should Defendant Mouzone request a continuance in order to attempt to locate a rebuttal expert to challenge Sgt. Ensor's identifications (Professor Schwartz is not a firearms toolmark examiner and therefore cannot express opinions regarding the actual identifications done by Sgt. Ensor), I would recommend that that request be granted. I also recommend that any additional funds be approved under the Criminal Justice Act to pay for any additional expert time on the part of Professor Schwartz or any other expert sought by Defendant Mouzone.

Further, to ensure that there are no future failings of this magnitude to live up to the letter and spirit of Rule 16, I recommend that Judge Quarles order the United States Attorney's Office to provide a written report which identifies any policies and training in existence regarding compliance with Rule 16 discovery obligations, to include how the policy is implemented and monitored to ensure compliance.

Finally, I recommend that Judge Quarles not allow the Government to imply that the Defendant had, but did not take, the opportunity to hire an expert to visit the BCPD Forensic Services Division laboratory and review the evidence. Further, I recommend that Judge Quarles not allow Sgt. Ensor or any other Government witness to testify to that effect. Given that Defendant Mouzone repeatedly requested evidence in this case without receiving a response

from the Government, it would be unfair to suggest that he had the opportunity to hire an expert or review the evidence.

III. Recommendations

I recommend:

- (1) That Sgt. Ensor not be allowed to opine that it is a “practical impossibility” for any other firearm to have fired the cartridges other than the common “unknown firearm” to which Sgt. Ensor attributes the cartridges;
- (2) Additionally, that Sgt. Ensor only be permitted to state his opinions and bases without any characterization as to degree of certainty (whether “more likely than not” or “to a reasonable degree of ballistic certainty”);
- (3) Alternatively, if you disagree with Recommendation No. 2, that Sgt. Ensor only be allowed to express his opinions “more likely than not”;
- (4) Alternatively, if you disagree with Recommendation Nos. 2 and 3, that Sgt. Ensor only be allowed to express his opinions “to a reasonable degree of ballistic or technical certainty” (or any other version of that standard);
- (5) That Defendant Mouzone be granted a continuance to attempt to locate a rebuttal expert to challenge Sgt. Ensor’s identifications, if he so requests;
- (6) That additional funds be approved under the Criminal Justice Act to pay for any additional expert time on the part of Professor Schwartz or any other expert sought by Defendant Mouzone to testify at trial, if permitted by the Court;
- (7) That the United States Attorney’s Office be required to provide a written report which identifies its policies and training regarding compliance with Rule 16 discovery

obligations, to include how the policy is implemented and monitored to ensure compliance; and

(8) That the Government not be permitted to argue or imply that the Defendant had, but did not take, the opportunity to hire a firearms toolmark identification expert to visit the BCPD Forensic Services Division laboratory and review the evidence, and that no Government witness be permitted to testify that such an opportunity existed.

Dated: October 29, 2009

_____/S/_____
Paul W. Grimm
United States Magistrate Judge